

COPS- Consolidation of Products and Specifications



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What is COPS?

- ◆ Consolidation Of Products and Specifications “COPS”
 - ✓ Minimum Specifications for Traffic Control Signals and Devices (MSTCSD) “Min Specs”
 - ✓ Standard Specifications for Road and Bridge Construction (SSRBC)
 - ✓ Approved Product List (APL)
 - ✓ Qualified Products List (QPL)
 - ✓ Pay items
- ◆ Consolidation of multiple specifications and pay items spread across traffic signal, ITS, and lighting specifications (**Estimates Bulletin 12-12**)

History

◆ Part 1: *Effective July 2013*

- ✓ Conduit, Directional Bore (**Estimates Bulletin 12-15**)
- ✓ Pull Boxes (**Estimates Bulletin 12-19**)
- ✓ Communication cable (**Estimates Bulletin 12-18**)
- ✓ Vehicle Detectors (**Estimates Bulletin 12-17**)

History

◆ Part 2: *Effective Jan. 2014*

- ✓ Signs (**Estimates Bulletin 13-11**)
 - Static
 - Illuminated (Internally and Highlighted)
 - DMS
 - EDS
- ✓ Mid-block Crosswalk Enhancement Assemblies (**Estimates Bulletin 13-08**)
- ✓ Intersection Control Beacon (**Estimates Bulletin 13-12**)
- ✓ Pedestrian detectors (**Estimates Bulletin 13-13**)
- ✓ Video Equipment
- ✓ Network Devices

History

◆ Part 3: *Effective July 2014*

- ✓ Traffic Control Signal and Device Evaluation and Certification/Approval
- ✓ Signal Priority and Preemption Systems
- ✓ Traffic Controllers
- ✓ Traffic Control Signal and Device Installation Grounding
- ✓ Equipment Shelters

History- Details of Part 3

- ✓ 603 General Requirements
 - Traffic Control Signal and Device Evaluation and Certification/Approval
 - APL & Administrative changes included
- ✓ 620 Grounding and Lightning Protection
 - Formerly titled “Traffic Control Signal and Device Installation Grounding”
 - Incorporated Min Spec requirements
 - Content incorporated from 715 and 785

History- Details of Part 3

- ✓ 663 Signal Priority and Preemption Systems
 - Incorporated Min Specs
 - Pay Items include Optical, GPS, and Radio types
- ✓ 671 Traffic Controllers
 - Updated Material Requirements
 - Merged Min Spec requirements, with references to NEMA, CALTRANS, and other standards
- ✓ 677 Equipment Shelters
 - Incorporated text from 785-5 formerly for ITS applications
 - “Walk-in” shelters with HVAC, lighting, etc.

Part 4: Effective January 2015

- ◆ 641/649- Poles and Camera Lowering Devices
- ◆ 650- Vehicular Traffic Signal Assemblies
 - ✓ Signal heads, backplates, LED modules
- ◆ 653- Pedestrian Signal Assemblies
- ◆ 659- Signal Head Auxiliaries
- ◆ 670- Traffic Controller Assemblies
 - ✓ 676 Cabinet + 671 Controller
- ◆ 678- Traffic Controller Accessories
- ◆ 680- System Control Equipment
 - ✓ Adaptive Control
- ◆ 990- Truck Mounted CMS (from A610)

Part 4: Effective January 2015

- ◆ Multiple Specification Sections: Removal of Existing Traffic Signal Equipment Pay Items
 - ✓ 690 valid through December 2014
 - ✓ “Remove” operation is now incorporated into applicable sections effective January 2015, similar to other specifications:
 - Furnish & Install
 - Install
 - Relocate
 - Remove

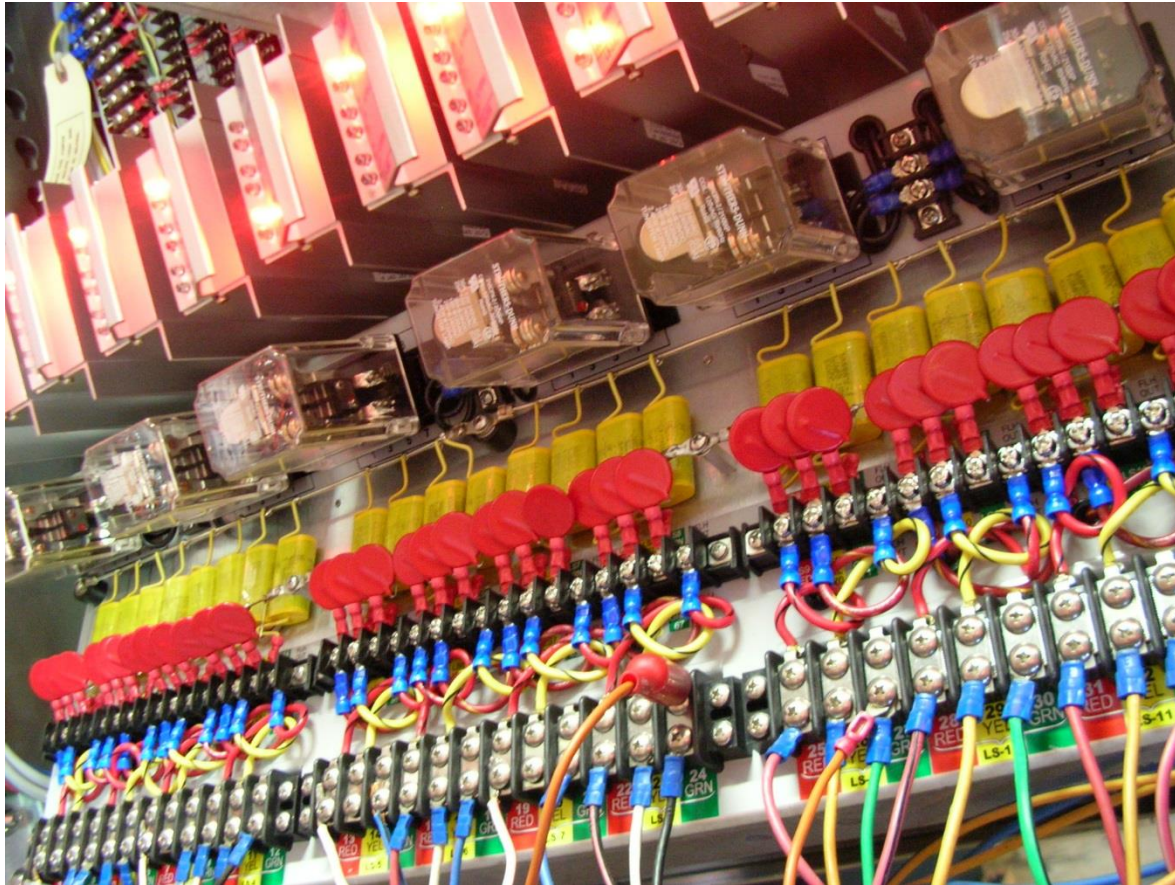
*Part 5: Scheduled for July 2015**

- ◆ Traffic Monitoring Site (Transportation Statistics Office)
Special Provisions to Standard Specifications
 - ✓ 741 - Vehicle Sensor
 - ✓ 743 – Speed/Classification Unit
 - ✓ 744 - Solar Power Unit
 - ✓ 745 - Loop Assembly
 - ✓ 746 - Cabinet
 - ✓ 747 - Modem/Communications
 - ✓ 748 - General Information/materials

◆ *Subject to change as specifications are developed

Changes for January 2015

- ◆ Taking a closer look at the changes for January 2015...



630, 632, 633 Conduit/Cable

- ◆ Changes related to “Remove” operation.
- ◆ 630 Removal of Conduit- valid only for above ground and bridge mount only.
- ◆ 632 Removal of Signal Cable- valid for “per intersection” or “outside of intersection”.
- ◆ 633 Removal of Fiber Optic Cable, Twisted Pair Cable, and Multi-Conductor Communication Cable.

Details will be posted with the **Estimates Bulletin** in mid-July.



634 Span Wire Assembly

- ◆ Removal of the Span Wire Assembly is per intersection, and includes all attachments (messenger wire, signal heads, signs, fiberglass insulator, etc.).



641/649 Pole Lowering Device

- ◆ Includes content formerly in ITS section 785 for CCTV poles and camera lowering devices.
- ◆ Pay items for CCTV poles with and without lowering devices are included in the following:
 - ✓ 641- Concrete poles
 - ✓ 649- Steel poles



641 Removal of Concrete Poles

- ◆ Replaces pay items from Section 690.
- ◆ 641-2-AB Prestressed Concrete Pole, EA
 - ✓ All pedestal and service poles are to be removed completely.
 - ✓ Payment includes the removal of all attachments (pedestrian signal, pedestrian detector, etc.)
 - ✓ Removal of span wire and span wire attachments paid separately.

6 (Complete Removal- Pedestal/Service Pole) B=0

7 (Shallow Removal- Poles 30' and greater) B=0

8 (Deep Removal- Poles 30' and greater) B=0



649 Removal of Steel Poles

- ◆ Replaces pay items from Section 690.
- ◆ Includes the pole, foundation, and any attachments (signals, signs, etc.)
- ◆ Shallow= 4 ft below surface
- ◆ Deep= complete removal of foundation

649-1-AB Steel Strain Pole, EA

A= 6 (Remove)

B= Removal Details

- 1 (Pedestal or service pole)
- 2 (Shallow, Direct Burial)
- 3 (Shallow, Bolt on Attachment)
- 4 (Deep, Direct Burial)
- 5 (Deep, Bolt on Attachment)



649-3A-BCC Steel Mast Arm Assembly, EA

A= 6 (Remove)

B= Removal Details

- 3 (Shallow, Bolt on Attachment) CC=00
- 5 (Deep, Bolt on Attachment) CC=00

643 Wood Poles /646 Aluminum Poles

- ◆ Removal pay items added.
- ◆ Includes the removal of attachments (pedestrian signal, pedestrian detector, etc.)
 - ✓ 643 Wood Strain Poles
 - ✓ 646 Aluminum Signals Pole/Pedestal
- ◆ Design Standards are applicable for Pedestal.
- ◆ Tech Specs/Plan Details may be needed.

650 Vehicular Traffic Signal Assemblies

- ◆ Min Spec A650 moved to 650 and other applicable sections.
- ◆ Auxiliaries detailed in Section 659.
 - ✓ No separate payment for “auxiliaries” for new installations.



650 Vehicular Traffic Signal Assemblies

- ◆ New pay item for removal
 - ✓ **650-A-BCD Traffic Signal, AS**
A= 6 (Remove) BCD=000
 - ✓ No separate payment when span wire or mast arm is removed.
- ◆ NOTE: 650 items are NOT valid for MOT operations.
 - ✓ 102-104 Temporary Signalization and Maintenance
 - ✓ 102-107-1 Temporary Detection and Maintenance
 - ✓ Refer to **Estimates Bulletin 14-03**

653 Pedestrian Signal Assemblies

- ◆ Min Spec A653 incorporated into Section 653.
- ◆ No separate payment for removal of attachments (Pedestrian Signal or Pedestrian detector) when removing the entire pole.
- ◆ **653-abc Pedestrian Signal, AS**
A= 6 (Remove) BCD=000

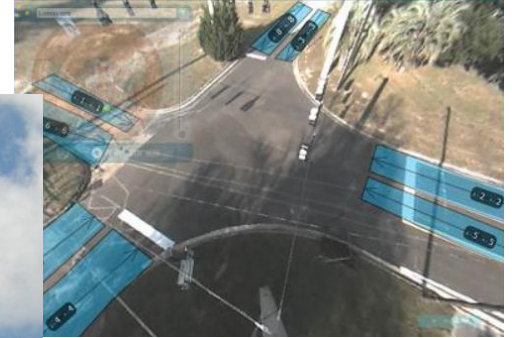


659 Signal Head Auxiliaries

- ◆ New Specification Section, includes text from Min Spec A659.
- ◆ 659 specification is more generalized to include auxiliaries for signals, signs, cameras, and detectors.
 - ✓ Includes signal housings, modules, disconnects, backplates, visors, hangars, and attachment hardware
- ◆ New 650 and 659 specs. begin migration to performance standards for hurricane resistance
 - ✓ i.e., 740 lbs flexure and 7400 lbs tension loading
 - ✓ More to come....
- ◆ No separate payment for new installations. 659 pay items are only used for repair/retrofit applications.

660 Vehicle Detection Systems

- ◆ Removal items were previously added to the pay item structure
 - ✓ Microwave
 - ✓ Video
 - ✓ Wireless Magnetometer
 - ✓ AVI
- ◆ No separate payment for loops removed by milling operations.
- ◆ No other specification changes.

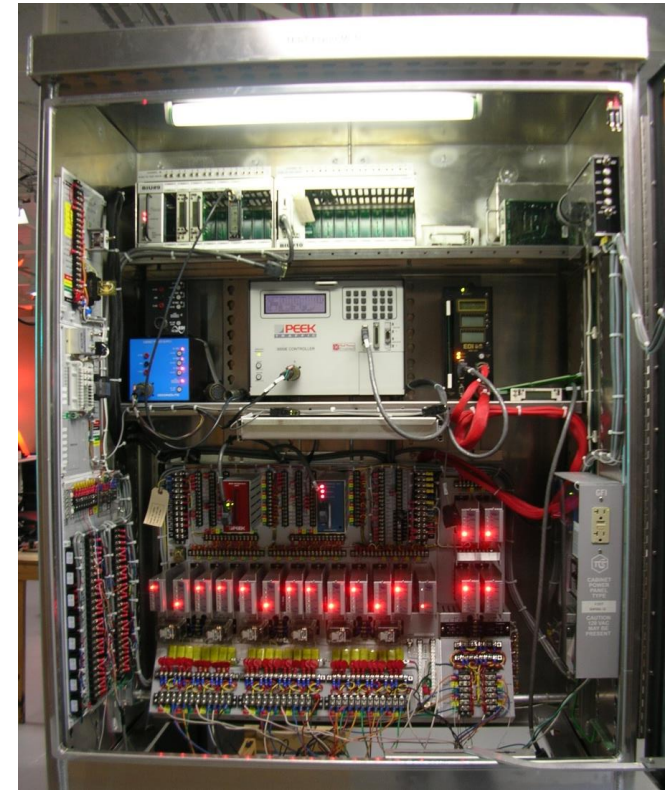


670 Traffic Controller Assemblies

- ◆ Min Spec A670 incorporated into Section 670.
- ◆ Payment for NEW ASSEMBLIES Includes the traffic controller, traffic controller accessories (including monitors, load switches, flasher, flash transfer relay, power supplies), and other equipment wired into a controller cabinet to make a complete and operational assembly.
- ◆ Payment for Repair/Replacement of controller and cabinet will be available under separate sections, where a complete assembly is not needed.

678 Traffic Controller Accessories

- ◆ Previous 33-page Min Spec A678 was reduced to 2 pages in Section 678, by referencing national NEMA and CALTRANS standards.
- ◆ Accessories include conflict monitors/malfunction management units, load switches, flashers, time switches, relays, master clock
- ◆ No separate payment under 678 for new assemblies.



680 System Control Equipment

- ◆ New specification is for Adaptive Signal Control Systems external to the traffic signal controller and central system. (This is not adaptive software.)
- ◆ Section may be expanded to cover other systems in the future
- ◆ Old pay item group was for “Traffic Operations System-Control Center” (Monitoring Center). These pay items are no longer valid. Call for assistance.



990-3.6 Truck Mounted Changeable Message Sign

- ◆ Min Spec A610 incorporated into Section 990.
- ◆ Truck Mounted CMS allowed for moving construction and maintenance operations and incident management (Road Rangers).
- ◆ Display a minimum of two lines of eight 10-inch characters.
- ◆ Amber LED pixel technology.
- ◆ Payment included under Maintenance of Traffic (102).



Updates

- ◆ Estimates Bulletin(s) will be issued mid-July.
- ◆ Estimates Bulletin announcements are distributed through the Contact Database
 - ✓ Contact Management System/ Contact Mailer
 - ✓ <http://www.dot.state.fl.us/projectmanagementoffice/contactdatabase.shtm>
 - ✓ Free registration
 - ✓ FDOT and Consultants

Thank you for you time!

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